A close up of a sign

Description automatically generated

Community Mitigation Strategies

Implementation Guide

Overview

Overview

* Developing an Implementation Plan
* Goals & Principles
* Authorities

Concept of Operations

* National Standard PHEP Capabilities
* Pandemic Assessment

Implementation

* NPI Breakdown
* Implementation Factors
* Topical Considerations
* Access & Functional Needs
* Public Health Messaging

Recovery

* Indicators to Determine Community Mitigation Abatement
* Phased Recover Example

Resources

Page

3

5

9

10

The intent of this document is to provide guidance to Montana communities for developing strategies to prevent the spread of respiratory virus infections, specifically for COVID-19. The implementation of these strategies is known as community mitigation.

Community mitigation is a set of actions that communities can take to help slow the spread of respiratory virus infections. Community mitigation is especially important in pandemic situations when a vaccine or drug is not yet available and are the most readily available strategy to help slow transmission of respiratory diseases. These mitigations, commonly known as nonpharmaceutical interventions (NPI), highly depend on the participation of the community members to be effective.

**Developing an Implementation Plan**

Community mitigation is best when planned before it is needed. However, any collaboration for community affairs at any point is a positive exercise in resilience. Planning mitigation strategies, regardless the stage of a pandemic should involve all of the appropriate sectors of the community.

Core planners for creating a community mitigation implementation plan are

* Public health agency
* Elected officials
* Emergency management coordinator
* Health care organizations (hospital, EMS, urgent care clinics, etc.)
* Local health board and health officer

Also consider the following sectors to participate

* Agriculture departments
* Assisted living /Long term care centers
* Business leaders
* Community and faith-based organizations
* Environmental health agencies
* Government agencies
* Groups representing and serving populations with access and functional needs
* Life and Safety services
* Legal authorities
* Mental/behavioral health agencies
* School districts
* Social services
* Travel and transportation service agencies
* Tribes and native-serving organizations

**Goals & Principles**

Implementing a community mitigation interventions plan during a COVID-19 outbreak should:

1. Minimize potential spread and reduce morbidity and mortality of COVID-19 in communities.

Goals

1. Adapt to the disruption caused by implementing interventions to prevent community spread.
2. Prevent healthcare system overload to a community outbreak response is an integrated part of community interventions.
3. Integrate the community mitigation interventions with current health system preparedness and response plans and interventions.
4. Ensure community mitigation intervention strategies are coordinated across systems (e.g., local, state, federal public health) and sectors (e.g., education, healthcare, community, business, corrections).

**Principles**

* Each community is unique, and appropriate mitigation strategies will vary based on the level of community transmission, its characteristics and populations, and the local capacity for implementation.
* Activation of community emergency plans or a declaration of a jurisdictional emergency is critical for implementing coordinating community mitigation interventions.
* Mitigation strategies should include the safety and social well-being of groups most vulnerable to severe illness as well as those at an economic disadvantage. Strategies must balance individual liberties with ethically protecting the community and other people.
* Mitigation strategies can be scaled up or down depending on the evolving local situation with the appropriate benchmarks.
* Selection and implementation of these actions should be guided by the local characteristics of disease transmission, demographics, and public health and healthcare system capacity
* Public health departments may need to implement mitigation strategies to identify cases and conduct contact tracing.

Principles

**Authorities**

Relevant authorities to implement community mitigation measures fall under *Montana Code Annotated* 2019, TITLE 50. HEALTH AND SAFETY, CHAPTER 1. ADMINISTRATION OF PUBLIC HEALTH LAWS, Part 1. General Provisions and Part 2. Department.

1. MCA 50-1-103. Enforcement of public health laws. <https://www.leg.mt.gov/bills/mca/title_0500/chapter_0010/part_0010/section_0030/0500-0010-0010-0030.html>
2. MCA 50-1-105. Policy -- purpose.<https://www.leg.mt.gov/bills/mca/title_0500/chapter_0010/part_0010/section_0050/0500-0010-0010-0050.html>
3. MCA 50-1-106. Collaboration and relationships within public health system. <https://www.leg.mt.gov/bills/mca/title_0500/chapter_0010/part_0010/section_0060/0500-0010-0010-0060.html>
4. MCA 50-1-202 General powers and duties. <https://www.leg.mt.gov/bills/mca/title_0500/chapter_0010/part_0020/section_0020/0500-0010-0020-0020.html>
5. MCA 50-1-203 Public health inspections. <https://www.leg.mt.gov/bills/mca/title_0500/chapter_0010/part_0020/section_0030/0500-0010-0020-0030.html>
6. MCA 50-1-204 Quarantine and isolation measures. <https://www.leg.mt.gov/bills/mca/title_0500/chapter_0010/part_0020/section_0040/0500-0010-0020-0040.html>

Concept of Operations

Jurisdictions should base their preparedness and response operations on Capability 11 – Nonpharmaceutical Interventions from the Public Health Emergency Preparedness and Response Capabilities National Standards (October 2018). These PHEP Capabilities are reinforced through annual cooperative agreement funding. Deliverable requirements for each jurisdiction related to planning, Epidemiology, Food & Water Safety, Laboratory, and Medical Countermeasures have all addressed NPIs. (<https://www.cdc.gov/cpr/readiness/capabilities.htm>)

There are three community mitigation strategies recognized by public health experts. Within those are eight NPI actions.

Community Mitigation Strategies

1. **Personal NPIs** – Personal protective measures for everyday use and personal protective measures reserved for influenza pandemics
2. **Community NPIs** – Social distancing, school closures and dismissals, business reductions, event cancelations, etc.
3. **Environmental NPIs** – Surface cleaning measures in homes, childcare facilities, schools, workplaces, and enclosed public spaces.

In 2017, CDC’s Community Interventions for Infection Control Unit developed NPI recommendations considering “the effectiveness of the intervention, the ease of implementation (including unwanted consequences), and the importance of the intervention as a public health strategy.” These interventions serve as the basis for mitigation strategies at any time, regardless of an ongoing public health emergency.

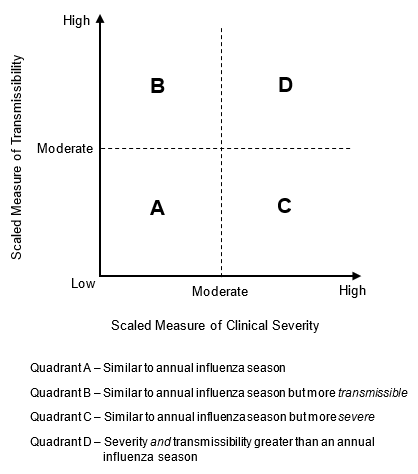
* **Isolation**
* **Quarantine**
* **Restrictions on movement and travel advisories or warnings**
* **Social distancing**
* **Environmental Hygiene (external decontamination)**
* **Respiratory hygiene and etiquette (handwashing, masks, and covering coughs)**
* **Closures of schools, businesses, and public events**

Nonpharmaceutical Interventions

**Pandemic Assessment**

The use of community mitigation depends on several indicators resulting from spreading disease. This guide draws from several sources. Two primary supporting sources are the CDC’s Pandemic Severity Assessment Framework (PSAF) and the Community Mitigation Guidelines to Prevent Pandemic Influenza (MMWR / April 21, 2017 / Vol. 66 / No. 1).

However, because planning will involve a broad spectrum of community sectors to include laymen without public health experience, the indicators and steps in this guide are reduced to simplistic forms representing the work in those two documents.

The PSAF lends itself well as a tool to assist in determining the appropriate community mitigation implementation.

The CDC will do a preliminary assessment of a suspected pandemic using the PSAF. In summary, it uses a range of epidemiological indicators to define pandemics. These indicators are divided into two scales.

1. **Viral Transmissibility** – how easily the virus spreads.
2. **Clinical Severity** – how sick the virus makes people.

The determined values of each are plotted to assess the impact of a pandemic. See the figure at the right.

CDC provides more refined assessments during pandemics as data becomes available.

The PSAF assessment may come from Montana DPHHS or from the CDC. Montana DPHHS will provide guidance in either case and assist community planners if needed.

Public health workers will conduct ongoing assessment, contact tracing, and other epidemiological practices to monitor the impact of the mitigation strategies and the progress of the disease. Adjustments to the level or rigor of the interventions may be adjusted to fit the community situation.

Implementation

Implementation of community mitigation for pandemics begin with a declaration of a public health emergency by the U.S. President, Governor of Montana, or a local level official with the appropriate authority. The Governor of Montana declared a state of emergency March 12, 2020 due to the COVID-19 pandemic. Subsequent declarations ordered implementations of NPI measures.

Nonpharmaceutical Intervention Breakdown

**Environmental NPI Strategy**

**NPIs recommended at all times**

* Environmental Hygiene (external decontamination)
  + Homes Schools & childcare centers
  + Workplaces
  + Food establishments
  + Public spaces

The accompanying boxes list the NPIs associated with each of the three community mitigation strategies. Some of the NPIs are recommended as daily habits for the prevention of all disease. Others are reserved measures for pandemic situations. Planners may consider each of these NPIs in contrast to the relevant PSAF assessment (A, B, C, D) when building their community implementation strategy.

**Personal NPI Strategy**

**NPIs recommended at all times**

* Quarantine: Staying home when exposed
* Respiratory hygiene and etiquette
  + Handwashing
  + Covering coughs

**NPIs for pandemics**

* Isolation: Staying home when ill
* Quarantine: Staying home when exposed
* Respiratory hygiene and etiquette
  + Handwashing
  + Covering coughs
  + Face masks

**Community NPI Strategy**

**NPIs for pandemics**

* Social distancing
* Restrictions on movement and travel advisories or warnings
* Mass gathering and event cancelations
* Schools
  + Closures
  + Distance learning
* Businesses
  + Telecommuting
  + Service reduction

**Community NPI Strategy**

**NPIs for pandemics**

* Social distancing
* Restrictions on movement and travel advisories or warnings
* Mass gathering and event cancelations
* Schools
  + Closures
  + Distance learning
* Businesses
  + Telecommuting
  + Service reduction

*Any of these strategies may be implemented pre-emptively as cautionary mitigations if warranted under a public health emergency.*

The following table lists factors for implementing community mitigation interventions and the related activities for each. Planners should carefully consider these elements with the goals and principals listed early in this guide in building their strategic plan.

|  |  |
| --- | --- |
| **Implementation factors** | **Implementation Activities**  TABLE 1. Factors to consider before implementing nonpharmaceutical interventions during an influenza pandemic (Adapted from MMWR / April 21, 2017 / Vol. 66 / No. 1) |
| **Ethical considerations** | * Promoting public input into NPI planning * Ensuring that NPIs benefit all groups within a community * Carefully considering and justifying any restrictions on individual freedom needed to implement NPIs (e.g., voluntary home quarantine of exposed household members) |
| **Feasibility of NPI implementation** | * Identifying practical obstacles to NPI implementation and considering ways to overcome them. Examples include the following: Educational issues (e.g., missed educational opportunities or loss of free or subsidized school meals because of school dismissals) * Financial issues (e.g., workers who cannot afford to stay home when they are ill or to care for an ill family member because they do not have paid sick leave) * Legal issues (e.g., local jurisdictions that do not have the legal authority to close schools or cancel mass gatherings for public health reasons) * Workplace issues (e.g., access to clean water, soap, or hand sanitizer and flexible workplace policies or arrangements) |
| **Activation triggers, layering, and duration of NPIs** | * Maximizing the effectiveness of NPIs by taking the following actions: Identifying activation triggers to ensure early implementation of NPIs before explosive growth of the pandemic * Planning for simultaneous use of multiple NPIs because each NPI is only partially effective * Planning for long-term duration of school dismissals and social distancing measures |
| **Selecting NPIs for groups at risk for severe influenza complications and for those with limited access to care and services** | * Identifying strategies for implementing NPIs among groups at high risk for severe influenza-related complications, including the following: Pregnant women * Persons aged <5 years and ≥65 years * Persons with underlying chronic diseases * Persons in institutions * Identifying strategies for implementing NPIs among groups who might experience barriers to or difficulties with accessing or receiving medical care and services, including the following: Persons who are culturally, geographically, or socially isolated or economically disadvantaged * Persons with physical disabilities, limitations, or impairments * Persons with low incomes, single-parent families, and residents of public housing * Persons who live in medically underserved communities |
| **Public acceptance of NPIs** | * Promoting public understanding that individual action is essential for effective implementation of NPIs in every pandemic scenario. In many scenarios, both personal and community NPIs might be recommended. NPI recommendations might change as new knowledge is gained. * Identifying key personnel to disseminate emergency information (e.g., alerts, warnings, and notifications) and establishing communication channels that enable members of the public to ask questions and express concerns (e.g., call centers or social media sites) * Ensuring that school dismissals and other NPIs are acceptable to the community during a pandemic * Coordinating with local partners to support households complying with voluntary home quarantine (e.g., providing necessary food and supplies) * Identifying strategies for mitigating the secondary consequences of school dismissals and other social distancing measures (e.g., modifications or cancellations of mass gatherings) * Minimizing intervention fatigue\* during a pandemic |
| **Balancing public health benefits and social costs** | * Estimating economic and social costs of NPIs and their secondary (unintended or unwanted) consequences * Balancing those costs against public health benefits, with reference to different pre-pandemic planning scenarios * Identifying strategies for reducing the cost of NPI implementation |
| **Monitoring and evaluation of NPIs** | * Identifying ways to monitor and evaluate the following: Degree of transmission and severity of the evolving pandemic * Type and degree of NPI implementation * Level of compliance with NPI measures and the emergence of intervention fatigue * Effectiveness of NPIs in mitigating pandemic impact * Secondary consequences of NPIs and the effectiveness of strategies to mitigate them |

\* Fatigue that results from being requested, often repeatedly, to change daily behaviors for the good of the community, especially when those changes disrupt daily life (e.g., caring for children when schools are dismissed for several weeks or avoiding crowded settings) (Source: Ryan JR, ed. Pandemic influenza: emergency planning and community preparedness. 2008. Boca Raton, FL: CRC Press; 2008:158).

* Access to healthcare
* Assisted / Senior living facilities
* Childcare facilities
* Cleaning supplies availability
* Colleges & Universities
* Communal properties like playgrounds and parks
* Community & Faith based organizations
* Community size and density
* Community support
* Economic strength
* Essential services
* Family heritage traditions
* First responders
* Fitness centers
* Food establishment services
* Funerals
* Grocery stores
* Healthcare capacity
* Healthcare workforce mental health
* Homeless populations
* Native American cultures
* PPE availability
* Prisons/Correctional facilities
* Qualities of vulnerable populations
* Transportation
* Scheduled large annual events
* Schools
* Sporting events
* Workplaces/telework options

**Community Mitigation Intervention Topical Considerations**

**Access & Functional Need Populations**

Community mitigation strategies and interventions must integrate reasonable modifications to protect Montana’s access and functional needs population. For the purpose of public health emergency preparedness in Montana, this population is defined as people having access or functional health (i.e., mental or medical) or physical (i.e., motor ability) needs beyond their capability to maintain on their own during an emergency. It also refers to the “at risk” or “special needs” populations described in the Pandemic and All-Hazards Preparedness Act, also known as PAHPA (PUBLIC LAW 109–417—DEC. 19, 2006) and in the *National Response Framework (NRF)* (2013). It includes individuals who have medical and other functional needs before, during, and after an incident.

Planners for mitigation intervention must take into account the legal obligation to prepare to meet the needs of individuals who have disabilities as defined by the Americans with Disabilities Act Amendments Act of 2008, P.L. 110-325, and those associated with them.

Informing the Public

We cannot know in advance which groups will be most at-risk for severe outcomes during the next pandemic. However, advance planning will help ensure timely implementation of community-level measures that protect groups typically at higher risk for disease complications.

**Public Health Messaging**

Public health jurisdictions are required to have and maintain risk communications plans in place through the PHEP cooperative agreement. The Public Health Emergency Preparedness and Response Capabilities National Standards (October 2018) give the jurisdictions guidance in Capability 4 – Emergency Public Information and Warning for what is needed in preparing a proper and operational plan.

Jurisdictions with risk communications plans based on the principles found in the CDC’s Crisis Emergency Risk Communications (CERC) program (<https://emergency.cdc.gov/cerc/index.asp>), are well equipped to inform and educate the public about pandemic related NPIs and Community Mitigation strategies. CDC has also prepared a COVID-19 pandemic specific website for public health communicators. <https://www.cdc.gov/coronavirus/2019-ncov/php/public-health-communicators-get-your-community-ready.html>

*The most difficult task for implementing Community Mitigation Interventions is convincing the public to participate and take the actions needed to slow the progression of the disease.*

Planners for Community Mitigation implementation should include public affairs and information as part of the plan, and ideally use the Incident Command System’s Public Information Officer team to assist with the task.

Recovery

Community sector leaders, public health experts, and planners can begin preparing for an orderly and coordinated return to daily life as soon as they implement the community mitigation strategies. Recovery will depend on a variety of key indicators that would signal the appropriate time to start a controlled phase reduction of community mitigations. Not all of the indicators need to be met to begin a phased recovery. However, trends and epidemiological analysis should guide planners in developing a responsible approach to normalizing their community. Planners might want to develop other indicators as well that are unique to their communities.

Community planners should work with public health authorities to determine which interventions should continue, and at what point each could abate. Planners should also identify which local services to phase in during the early stages of recovery.

Some community mitigations will have to remain in place during a phased approach. The public might demonstrate frustration or impatience about retaining those measures. Prepare a public communication campaign and appropriate materials to explain:

Indicators to Determine Community Mitigation Abatement

* Reduction in local spread (Epidemiology)
  + Usually determined through testing, contact tracing, and other public health practices
* Strain on critical infrastructure services
* Stress on local economy
  + Closed businesses
  + Job loss
  + Impaired commerce
* Waning public mood and tolerance of social changes
* Improvement of current and projected healthcare capacity
* Improvement of public health capacity
* Development and supply of vaccine
* The disease is still a danger, and control is still important
* There are actions the people can take to alleviate the perceived negative effects of interventions that remain in place
* Restrictions will be lifted when it is safe to do so as time passes, and the disease is more controlled
* Changing the community mitigation strategies might be a slow and phased progression back to normalcy

This table represents a model of a phased recovery approach. A community mitigation interventions recovery plan should be more robust and detailed to facilitate a smooth transition. Remember, not all the indicators need to be met.

Example

TABLE 2. Example of a phased approach to reducing community mitigation interventions

|  |  |  |  |
| --- | --- | --- | --- |
| Phase | Sample Indicators | | Sample Activities |
| Phase 1 | | * Significantly reduced spread of the disease * Stress on local economy * Improvement of public health capacity | * Allow some business to open but maintain social distancing * Lift travel restrictions * Retain restrictions on mass gatherings * Continue personal NPIs * Continue environmental NPIs |
| Phase 2 | | * Phase 1 indicators * Improvement of current and projected healthcare capacity * Strain on critical infrastructure services | * More business types allowed to open, including food establishments * Assembly of groups of limited size allowed * Restrictions on community activities lifted but maintain social distancing |
| Phase 3 | | * Phases 1 and 2 indicators * Waning Public mood and tolerance of interventions * Development and supply of a vaccine | * Personal and Environmental interventions encouraged to maintain prevention of any disease * All pandemic community mitigation interventions lifted |

Resources

Crisis & Emergency Risk Communication (CERC)|CDC. (2018, January 23). Retrieved April 29, 2020, from <https://emergency.cdc.gov/cerc/index.asp>

Communities, Schools, and Workplaces. (2020, April 17). Retrieved April 29, 2020, from <https://www.cdc.gov/coronavirus/2019-ncov/community/index.html>

Coronavirus Disease 2019 (COVID-19). (n.d.). Retrieved April 29, 2020, from <https://www.cdc.gov/coronavirus/2019-ncov/index.html>

Fong, M. W., Gao, H., Wong, J. Y., Xiao, J., Shiu, E. Y., Ryu, S., & Cowling, B. J. (2020, April 16). Nonpharmaceutical Measures for Pandemic Influenza in Nonhealthcare Settings-Social Distancing Measures - Volume 26, Number 5-May 2020 - Emerging Infectious Diseases journal - CDC. Retrieved April 30, 2020, from <https://wwwnc.cdc.gov/eid/article/26/5/19-0995_article>

Key Strategies to Prepare for COVID-19 in Long-term Care Facilities (LTCFs). (2020, April 15). Retrieved April 29, 2020, from <https://www.cdc.gov/coronavirus/2019-ncov/hcp/long-term-care-strategies.html>

Kinlaw, K., & Levine, R. (2007, February 15). ETHICAL GUIDELINES in PANDEMIC INFLUENZA. Retrieved June 12, 2020, from <https://www.cdc.gov/od/science/integrity/phethics/panFlu_Ethic_Guidelines.pdf>

Nonpharmaceutical Interventions (NPIs). (2020, April 27). Retrieved April 30, 2020, from <https://www.cdc.gov/nonpharmaceutical-interventions/index.html>

Public Health Communicators: Get Your Community Ready. (2020, April 15). Retrieved April 29, 2020, from <https://www.cdc.gov/coronavirus/2019-ncov/php/public-health-communicators-get-your-community-ready.html>

Public Health Preparedness Capabilities: National Standards for State and Local Planning. (2019, November 13). Retrieved April 29, 2020, from <https://www.cdc.gov/cpr/readiness/capabilities.htm>

Pandemic Severity Assessment Framework (PSAF). (2016, November 03). Retrieved April 29, 2020, from <https://www.cdc.gov/flu/pandemic-resources/national-strategy/severity-assessment-framework.html>

People Who Need to Take Extra Precautions. (2020, April 29). Retrieved April 30, 2020, from <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/index.html>

Qualls N, Levitt A, Kanade N, et al. Community Mitigation Guidelines to Prevent Pandemic Influenza — United States, 2017. MMWR Recomm Rep 2017;66(No. RR-1):1–34. DOI: <https://www.phe.gov/Preparedness/planning/authority/nhss/Pages/communities.aspx>

Search Results for "nonpharmaceutical interventions" CDC stacks. (n.d.). Retrieved April 30, 2020, from <https://stacks.cdc.gov/gsearch?collection=&terms=nonpharmaceutical+interventions&x=0&y=0>

Attachments

* CDC Community Mitigation/NPI Plan Checklist
* CDC Implementation of Mitigation Strategies for Communities with Local COVID-19 Transmission
* ABSA Brochure for planning community events

<https://absa.org/wp-content/uploads/2020/08/ABSA-Covid-19-And-Your-Community.pdf>

**Community Mitigation/NPI Plan checklist**

* Adjusting interventions based on epidemiology, surveillance, healthcare, and public health capacity to help mitigate adverse effects or unintended consequences (e.g., failure of a key business when the threat of transmission in the community is low).
* Developing and tracking short-, medium-, and long-term outcomes of the plan.
* Communicating findings to key stakeholders throughout the period of performance.
* Consolidating and making available a list of laws, regulations, and rules that support the execution the response in the jurisdiction as well as providing access to legal counsel.
* Engaging departments, agencies, and associations at the state level to develop supplemental guidance for their constituents in the state (e.g., departments of education and corrections, child-care organizations, state patrol, state hospital associations, Better Business Bureau).
* Highlighting partnerships with businesses and support agencies in the state that can assist with the response at the local level.
* Developing a method to access input from members of the public regarding their understanding of the reasons for the interventions, their perceptions, and the impact the interventions are having on their mental and economic health.
* Providing language translation of key guidance and messages to use in web sites, radio spots, and other media to support public health and safety.
* Providing access to case managers and workers that support programs which may provide services in need during the response. These could include programs that:
* Provide training and technical assistance to the health facilities to include healthcare associated infections (HAI) coordinators and those who have recently worked with long-term care facilities to train on new Centers for Medicare and Medicaid Services (CMS) rules.
* Provide access to assistance programs (e.g., Supplemental Nutrition Assistance Program (SNAP), Medicaid, Child Services, charitable food system, unemployment).
* Providing information regarding the support available from call centers both at the national and state levels and determining a method to collect information regarding concerns in the community.
* Providing details on caches of supplies and equipment available to support interventions (e.g., trailers, computers, disinfectants).
* Engaging public health, healthcare, emergency managers, legal counsel and law enforcement personnel to discuss the triggers and actions for initiating isolation and quarantine orders and for relaxing the orders.
* Assessing in their state and communities who they are planning to work with and what and where are the greatest needs including which groups of individuals at higher risk of severe illness or who may need extra assistance.

A screenshot of a cell phone

Description automatically generated

A screenshot of a social media post

Description automatically generated

A screenshot of a cell phone

Description automatically generated

A screenshot of a cell phone

Description automatically generated

A screenshot of a cell phone

Description automatically generated

A screenshot of a cell phone

Description automatically generated

A screenshot of a cell phone

Description automatically generated

A screenshot of a cell phone

Description automatically generated

A screenshot of a cell phone

Description automatically generated

A screenshot of a cell phone

Description automatically generated

